

REMARKS

Claims 1-34 stand rejected in the application. Claims 1, 21, 30, and 31 are amended herein. Claims 2, 23, and 24 are canceled. Claims 1, 3-22, and 25-34 remain pending. The Applicant respectfully requests consideration of the following remarks and allowance of the remaining claims.

Objection to the Specification

The specification is objected to for informalities. The specification has been amended as suggested by the Examiner. Accordingly, the Applicant respectfully requests withdrawal of the objection to the specification.

35 U.S.C. § 112 Rejection

Claims 30 and 31 stand rejected under 35 U.S.C. § 112 for insufficient antecedent basis. Claims 30 and 31 have been amended to correct the insufficient antecedent basis. Accordingly, the Applicant respectfully requests withdrawal of the 35 U.S.C. § 112 rejection of claims 30 and 31.

35 U.S.C. § 103 Rejection

Claims 1, 3, 5, 7, 8, 11, 12, 14, 16, 19, 21, 22, 26, 28, 31, and 34 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,111,391 (Fields) in view of U.S. Patent Application Publication No. 2002/0143597 A1 (Andre). Claims 2, 23, and 24 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Fields in view of Andre and further in view of U.S. Patent No. 6,587,831 B1 (O'Brien). The Applicant respectfully traverses the rejection in light of the following remarks.

Independent claim 1 has been amended to incorporate the limitations of claim 2. Independent claim 21 has been amended to incorporate the limitations of claims 23 and 24. Therefore, the discussion of the rejection of the independent claims will include a discussion of the rejection of claims 2, 23, and 24.

Claim 1 now recites, in part, processing past schedules using a *pattern recognition procedure to recognize historical shift patterns for a particular position* indicated in the past schedules. The historical shift patterns comprise a *resource dependent shift pattern*,

a *time dependent shift pattern*, and a *ratio dependent shift pattern*. An initial workforce schedule is then created based on the *historical shift patterns* and employee attributes.

The Examiner admits that Fields and Andre do not disclose creating an initial workforce schedule using a pattern recognition procedure to recognize past resource shift patterns for a particular employee position (OA, p. 9, 2nd full paragraph). The Examiner then asserts the O'Brien discloses generating a schedule based on business parameters including shift patterns (OA, p. 9, 2nd full paragraph). The Applicant respectfully disagrees with this assertion because the Examiner has mischaracterized the "shift patterns" in O'Brien.

In fact, O'Brien actually teaches using "shift patterns" to generate a schedule, wherein shift patterns refer to shift work. Those of ordinary skill in the art understand shift work to refer to divisions of a work day, generally three 8-hour shifts per 24-hour period. In particular, O'Brien refers to shift data, such as the start of a shift, the end of a shift, which shift is worked by a certain employee, and whether a shift is overstaffed (O'Brien, col. 3, line 67 – col. 4, line 3). O'Brien teaches assigning employees to a certain shift of work, not "shift patterns" related to shifting schedules, shifting employees, shifting skill sets, and shifting time dependencies as taught in paragraphs 33-40 of the Current Application.

Specifically, claim 1 recites recognition of historical shift patterns comprising resource dependent shift patterns, time dependent shift patterns, and ratio dependent shift patterns. For example, a resource dependent shift pattern could be that a resource is working a particular position every day, a time dependent shift pattern could be that a specific task needs to be performed during a specific time period, and a ratio dependent shift pattern could be that at least four units of position of type II are required for each position of type I (Current Application, para. 34). O'Brien makes no mention of historical shift patterns comprising a resource dependent shift pattern, a time dependent shift pattern, and a ratio dependent shift pattern, as required by claim 1.

Further, O'Brien fails to disclose using a *pattern recognition procedure* to recognize historical shift patterns, as required by claim 1. The pattern recognition procedure in the Current Application considers staff attributes and skills as well as past schedules to create the initial workforce schedule (Current Application, para. 8). The

pattern recognition procedure is part of a neighborhood search algorithm that incorporates user input, employee preferences, and historical scheduling patterns (Current Application, para. 8). In contrast, O'Brien merely teaches examining patterns of workloads. For example, O'Brien may change a shift pattern by changing a shift start time and a shift end time based on an anticipated workload (O'Brien, col. 6, lines 9-11), but O'Brien makes no mention of a *pattern recognition procedure* to recognize historical shift patterns.

Additionally, O'Brien fails to teach recognizing patterns *for a particular position*, as required by claim 1. Rather, O'Brien teaches generating a schedule based partially on shift start and shift end times, the maximum times an employee can work the same shift per schedule, and whether the shift may be overstaffed to fill minimal hours (O'Brien, col. 3, line 57 – col. 4, line 3). O'Brien does not disclose recognizing historical shift patterns for a particular position, but merely receives data related to a particular shift. Thus, the use of shift patterns in O'Brien is not equivalent to using a pattern recognition procedure to recognize historical shift patterns for a particular employee position in claim 1.

The combination of the references fails to disclose, teach, or suggest all of the limitations of claim 1. Therefore, the 35 U.S.C. § 103(a) rejection of claim 1 should be withdrawn. Independent claim 21 contains limitations similar to claim 1 and should be allowed for at least the same reasons as claim 1.

The remaining dependent claims, while separately allowable over the prior art, depend from otherwise allowable independent claims. A discussion of the dependent claims is therefore omitted for the sake of clarity and brevity.

CONCLUSION

Based upon the above remarks, the Applicant submits that the claims in their present form are allowable. The Applicant thus respectfully requests allowance of the claims.

The Applicant believes no fees are due with respect to this filing. However, should the Office determine that additional fees are necessary, the Office is hereby requested to contact the undersigned to arrange for payment of the applicable fees.

Respectfully submitted,

/Shannon L. Silversmith/

SIGNATURE OF PRACTITIONER

Shannon L. Silversmith, Reg. No. 60,938

Setter Roche LLP

Telephone: (720) 562-2280

Correspondence address:

CUSTOMER NO. 63059

Setter Roche LLP

P.O. Box 780

Erie, CO 80516